

HELIANTHUS CILIARIS NATIVITY AND WEEDINESS

SWEMP inquiry: *Helianthus ciliaris* is listed on Arizona and California state noxious weed lists. Some sources (including *Utah Flora*) say it is an Arizona native, others that it is a southeastern native that has invaded the west. Do you have any information on the nativity/weed status of this one?

Dr. Ed Northam, Arizona Dept. of Agriculture replies: Literature reviews have not revealed any information that documents an introduction date or dissemination site where blueweed sunflower entered Arizona. Most sources indicate it is a native of southwestern US (Texas to Arizona). My observations of this plant in fields and disturbed sites of western Texas (Lubbock area) indicate Arizona has many habitats in the 2000-3500 ft zones that are ecologically similar to the semi-arid "native" areas in Texas.

There is no doubt that blueweed sunflower is an aggressive weed in cropland, but so is silverleaf nightshade, which is considered native to Arizona. My study of the blueweed nativity question concludes that information is inadequate to affirm this plant is not a natural part of Arizona flora, and because of this I will propose removing it from the state noxious weed list in our current rulemaking revision of Arizona Noxious Weed Rules. (Personal Communication, June 2003. Dr. Ed Northam, Arizona Department of Agriculture)

George Yatskievych, Flora of Missouri Project, Missouri Botanical Garden (Personal communication):

The 1969 monograph of *Helianthus* by Heiser et al. (Mem. Torrey Bot. Club 22(3):1-218) indicates that *Helianthus ciliaris* is native in the southwestern U.S. and adjacent Mexico. I have not read any publication since then to contradict this range. Perhaps the confusion is based on a misreading of the statements that *H. ciliaris* is a polyploid speculated to have arisen through past hybridization between some other southwestern species, but there is not much doubt that it is acting as a species. The monograph does mention that because of its strongly rhizomatous rootstock the species can be weedy.

This creates a quandary. A species can be a weed, even an agricultural pest but still be native to the region. Is the noxious weed list designed primarily to deal with exotics or with species that are weedy? There have been similar issues raised with some of the dodders and broomrapes, where some native species show up on noxious weed lists in states even though they are native to the state (and in a few cases also tracked as rare by conservation agencies in the same state). (Personal communication, June 2003,